

## Woloschak Lab Data Storage and Exchange Plan

### Purpose

This proposal aims to increase the efficiency and security of Woloschak Lab information storage and sharing practices.

### Services

#### *Information Storage*

It is important that lab computers be backed up routinely and securely. We propose Carbonite as an online backup service because it is easy-to-use, secure, off-site, and inexpensive. Carbonite can be set to run automatically; this will make it easier to perform backups routinely. Carbonite is also secure; it backs up data over a secure connection and stores in at an off-site data center in encrypted form. This will prevent data loss under even the most extreme circumstances, e.g., a fire at the Northwestern Lab that would destroy any external drives in the vicinity. (<http://www.carbonite.com>)

#### *Information Exchange*

Members of the lab frequently exchange large amounts of sensitive data with each other and between their own computers (e.g., from a travel laptop to an office desktop). The ease and security of these exchanges is important for lab productivity.

DropBox enables users to seamlessly synchronize designated folders across multiple computers. It also enables users to grant access to specific folders and to a specific set of users. The designated files can be accessed from any authorized computer or through an online interface. Furthermore, these exchanges take place over secure connections, and the data are backed up on the DropBox servers in encrypted form. (<http://www.getdropbox.com/>)

#### *Information Encryption*

The storage and exchange of certain highly sensitive data necessitate a highly robust encryption solution. Truecrypt is a free tool that seamlessly integrates strong encryption into the Windows, Mac, or Linux OS environments. This makes it extremely easy to use and highly secure. The same encryption algorithms are used to encode top secret documents by the U.S. Government. (<http://www.truecrypt.org>)

### Pricing

Service	Price \$ / yr	No. Units
Carbonite (online backup)	60	15
Dropbox 100 GB (shared folders)	200	1
Dropbox 2 GB (shared folders)	FREE	15
Truecrypt (encryption)	FREE	15
<b>Total</b>	<b>1100</b>	

### Conclusion

The services above will provide backup, file sharing, and secure file space for up to 15 computers, and 20 users. This will include coverage for all of the lab's computers and special coverage for Gayle and Tanja's computers. By comparison, the SurgIT plan previously suggested would have cost \$6750 / yr for the lowest tier plan on 15 computers. This plan represents a high value and should be instituted without delay.

